



System strengthening approaches for scaling up development outcomes from agricultural research

Knowledge sharing workshop

13–15 November 2018, Addis Ababa, Ethiopia



RESEARCH
PROGRAM ON
Roots, Tubers
and Bananas

 **Irish Aid**
Government of Ireland
Rialtas na hÉireann



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development outcomes from agricultural research**

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Workshop report

2018

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Acronyms

ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
AU	African Union
CIMMYT	International Maize and Wheat Improvement Center
CIP	International Potato Center
DARS	Department of Agricultural Research Services (Malawi)
DDG	Deputy Director General
DPASA	Provincial Directorate of Agriculture and Food Security (Mozambique)
FFS	Farmer Field Schools
FRG	Farmer Research Groups
FTC	Farmer Training Centers
GAP	Good Agricultural Practices
GDP	Gross domestic product
IA	Irish Aid
ICRISAT	International Center for Semi-Tropics Research
ICT	Information and communication technology
IIAM	Instituto de Investigacao Agraria do Mozambique
IITA	International Institute of Tropical Agriculture
ILRI	International Livestock Research Institute
MEL	Monitoring, Evaluation and Learning
MoA	Ministry of Agriculture
NARS	National Agricultural Research & Extension System
NGO	Non-governmental organization
OFSP	Orange-fleshed sweetpotatoes
PAMRDC	Multisectoral Action Plan for the Reduction of Chronic Undernutrition in Mozambique
PPP	Public private partnerships
PS	Private sector
R&D	Research and development
RTC	Root and tuber crop
RTCDT	Root & Tuber Crops Development Trust (Malawi)
SADC	Southern African Development Community
SARI	Southern Agricultural Research Institute (Ethiopia)
SBCC	Social behavioral change communication
SDG	Sustainable Development Goals
SETSAN	Technical Secretariat for Food Security and Nutrition (Mozambique)
SSA	Sub-Saharan Africa
TARI	Tigray Agricultural Research Institute (Ethiopia)

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We would also like to express our gratitude to Irish Aid for supporting the whole process of preparing the workshop as well as their active participation during the event. It is rare to see a donor showing this type of engagement and being open for joint learning.

We were also much encouraged by the working groups, which showed strong engagement of participants to share experiences and perspectives, reflect, discuss, analyze, provide constructive feedback to each other and process feedback into final group work documents.

Addis Ababa, November 2018

Executive summary

Understanding and strengthening systems is at the heart of CIP and partners' work to improve food security, nutrition, and economic benefits of the potato and sweetpotato sectors in Africa.

With support from Irish Aid, ongoing programs in Ethiopia, Malawi and Mozambique aim to strengthen government and market systems to achieve these outcomes in a sustainable and scalable manner. These systems strengthening approaches seek to utilize and further strengthen existing capacities, incentive frameworks, and institutional and market linkages to improve the reach and impacts of new agricultural technologies and management practices.

To date, these systems strengthening approaches have been implemented largely separately across the three countries and have not been systematically reviewed and analyzed by stakeholders and researchers. To remedy this deficiency, CIP organized a workshop, held in Addis Ababa in November 2018. The objective was to share, review and analyze experiences and results from system strengthening approaches across the potato and sweetpotato programs in Ethiopia, Malawi and Mozambique, as well as other initiatives that are working towards the same goal.

The workshop brought together some fifty participants from Ethiopia, Malawi and Mozambique, together with CIP staff from its headquarters in Lima and the CIP Africa Regional Office, as well as a delegation from Irish Aid and other interested partners from West Africa.

The three country programs showcased during the workshop illustrated how different systems interact within the food and agriculture system and influence overall performance towards the envisaged sustainable development goals (SDGs).

Innovation platforms initiated by CIP and partners demonstrated a new type of institutional arrangement for partnerships. Representatives from different systems meet and explore joint visions with win-wins for all stakeholders. CIP and partners increasingly engage in these new types of multi-stakeholder partnerships. A good example is the Roots and Tuber Crops Development Trust in Malawi, an institutionalized network where different partners agree to share investments and coordinate for synergy and stronger performance.

During the workshop, eight working groups each identified a set of highlights, lessons and recommendations for how different aspects of current system strengthening efforts could be improved. This key workshop output will allow CIP and partners to update their learning agenda as well as the design of future projects and programs.

In the closing sessions on moving forward, some of the main recommendations emphasized by participants included making information and documentation on the link between nutrition and agriculture more available to the general public, both online and via integration in curriculums for young people. CIP was also requested to consider creating a regional database on this topic for all interested stakeholders. In addition, workshop participants made a plea for more joint conferences and exchange learning visits, including farmers, for the three countries. These should showcase good practice in the domains of extension systems, multi-stakeholder platforms and seed-based programs. Consideration should also be given to creating an African learning group to link up with learning on other continents and learn from other crop and livestock success stories that have achieved nutrition results. Participants also recommended consideration of stronger learning by researchers and other stakeholders by jointly undertaking capacity gap analysis (analyzing enabling environment, institutional and technical performance/capacities) and developing a joint scale-up road map at country level; and CIP country actors joining the Regional Irish Potato coalition.

1. Background to the workshop

The [International Potato Center](#) (CIP) is a research-for-development organization with a focus on potato, sweetpotato, and Andean roots and tubers. CIP is dedicated to delivering sustainable science-based solutions to address the pressing world issues of hunger, poverty, gender equity, climate change and the preservation of our Earth's fragile biodiversity and natural resources. CIP and its partners are implementing research and development (R&D) programs to improve food security, nutrition, and economic benefits of potato and sweetpotato sectors in Africa. The Irish Aid (IA) funded projects in Ethiopia, Malawi and Mozambique aim to strengthen government and market systems to achieve outcomes in a sustainable and scalable manner.

These *systems strengthening* approaches seek to utilize and further strengthen existing capacities, incentive frameworks, and institutional and market linkages to improve the reach and impacts of new agricultural technologies and management practices. System strengthening interventions can enable stakeholders to guide and accelerate institutional change based on improved access to information, technologies, and institutional resources. To date, these approaches have been implemented largely separately across the three countries and have not been systematically reviewed and analyzed by stakeholders and researchers.

CIP and key partners, such as Irish Aid, have the ambition to reach (in principle) everybody by working through system strengthening. This supports the “no one left behind” ambition articulated in the 2030 Agenda for Sustainable Development. To share, review and analyze experiences and results from system strengthening approaches across potato/ sweetpotato programs in Ethiopia, Malawi, and Mozambique, CIP organized a three-day workshop in Addis Ababa, Ethiopia, on 13-15 November 2018. Other participants from related initiatives working towards the same goal at country and regional levels were also invited. These included representatives from CIP at global and regional level, country level partners from government, research, and private sector in the three countries, as well as a delegation from Irish Aid and two participants from Sierra Leone. The program overview, workshop brief, list of participants and workshop methodology are presented in Annexes 1,2, 3 and 4, respectively.

During the workshop, participants worked in one of eight groups, each addressing a different cross-cutting aspect of system strengthening. All groups received feedback, verbally and documented on cards, from the other groups. This allowed all groups to process feedback and formulate a set of recommendations. These recommendations were presented on the last day. They also identified a few ideas on priorities for moving forward.

During the last session, a panel responded to the propositions for moving forward from the participants. Panel members gave perspectives from the three countries, Irish Aid, CIP, and the perspective from West Africa. At the end, representatives from CIP headquarters and sub-Saharan Africa offices made the closing remarks. Participants received an USB flash containing all presentations as well as the results of the group work.

2. Introductory session

Welcome remarks were given by the host, CIP Ethiopia's country manager Berga Lemaga, CIP headquarters Deputy Director General Oscar Ortiz and Patrick McManus, Head of Development and *Chargé d'affaires* of the Irish Embassy, representing Irish Aid.

Afterwards participants introduced themselves and stated their expectations. For this they were organized in four groups representing different categories of participants: 1) researchers; 2) those that actively support extension systems; 3) participants working for a funding agency; and 4) other stakeholders involved in system strengthening. Within the group of 'others' there were a few representatives from the private sector, program managers, and government policy makers. Positioning the groups in the four corners of the room allowed participants to recognize the different backgrounds of people present. This reflected the importance in systems strengthening of acknowledging the roles and contributions of different types of actors.

The main clusters of expectations as expressed by participants were as follows: to share and learn from country examples (mentioned 18 times); to learn about systems and systems strengthening (mentioned 15 times); learn how to assist farmers and achieve results (10 times); and specific interest in areas such as nutrition and gender.

CIP Malawi country manager Daniel van Vugt provided the background and objectives of the workshop. With support from Irish Aid, current programs in Ethiopia, Malawi and Mozambique aim to strengthen government and market systems in a sustainable and scalable manner. He explained that system strengthening interventions can enable stakeholders to guide and accelerate institutional change based on improved access to information, technologies, and institutional resources. The purpose of the workshop was to share, review and analyze experiences and results from system strengthening approaches across potato/ sweetpotato programs in Ethiopia, Malawi, and Mozambique. The expected workshop outputs were:

- An overview of system strengthening approaches, emerging evidence and country experiences
- An updated learning agenda on systems strengthening
- Recommendations for improved program design, implementation, learning and coordination to increase effectiveness and efficiency of system strengthening efforts for sustainable impact.



Picture 1: Making together a jigsaw puzzle and discovering the system

This background presentation was followed by a ‘system energizer’, tasking participants to jointly assemble a jigsaw puzzle (see picture above). Every participant received two or three parts of the puzzle. At first four sub-groups started to work, but they were missing other parts and by working only on subsystems within the puzzle they were missing the bigger picture (the whole system). Some participants actively linked these subgroups (functioning as system brokers) and as a result, the full puzzle (system) could be made in about 20 minutes. Some participants started with the boundary pieces: each system has a system boundary. These boundaries determine the scope of the system. We also saw some participants actively facilitating the process and helping the group to make the full puzzle. Participants reflected on the relevance of this exercise for the nature of system strengthening work.

Next, introductory presentations were given on concepts and approaches related to systems strengthening. Jan Brouwers provided an introductory presentation on understanding systems and systems research. Simon Heck presented CIP’s experience with scaling up agricultural research outputs. For CIP, system strengthening is essential for achieving their mission and global objectives as it enhances effectiveness, equity, accountability, sustainability, and achieving outcomes and impacts at large scale.

Ms Alemtsehay from the Ethiopian Ministry of Agriculture (MoA) presented the Ethiopian experience of institutionalizing Nutrition Sensitive Agriculture. For Ethiopia, bridging the agriculture and health system is key for addressing nutrition: Ethiopia loses an estimated 16.5% of GDP annually due to child malnutrition; 2/3 of the adult population in Ethiopia suffered from stunting during childhood and 28% of current child mortality in Ethiopia is associated with undernutrition. The Ministry of Agriculture established a Food & Nutrition Coordination Office. Its overall goal is to contribute to improving the nutritional status of women and children by increasing the quantity, quality, availability, accessibility, and affordability of food and promoting utilization of diverse, nutritious and safe foods for all Ethiopians at all times.

Derek Roulston presented the Irish Potato Coalition, whose mission is to promote, enable, and initiate excellence across potato value chains in East Africa as a means of providing food security, nutrition, and climate change resilience to farmers and consumers.

3. Country sessions: Ethiopia, Malawi and Mozambique

3.1 Ethiopia country cases

Four presentations were made on the Ethiopian experiences related to system strengthening approaches and results:

1. Results from system strengthening approaches in potato/ sweetpotato research programs (Wellington Jogo and Haile Tesfaye, CIP Ethiopia)
2. Achievements and lessons learned from system strengthening of CIP-TARI project (Abadi (TARI, SARI)
3. Achievements and lessons learned from system strengthening and institutionalization of CIP- BOH Tigray (Ato Teklay, Tigray BOH)
4. System strengthening perspectives from the National Agricultural Extension System (Tesema Jenorei (BOA, SNNPR) and Fisseha Bezabh (BOA, Tigray))

Each presentation ended with a questions-and-answers session. All presentations are available via CIP-Ethiopia or the authors.

3.2 Malawi panel

After a short energizer capturing key lessons from the first day, the second day started with the Malawi experiences. CIP Malawi country manager Daniel van Vugt provided an overview of the Malawi program with potato/ sweetpotato research programs being operated with a country-wide development impact in mind.

Malawi participants illustrated the program with a rich overview of different perspectives in the form of a panel, facilitated by Felistus Chipungu (CIP Malawi). The panel members provided insights on the role of the National Agricultural Research & Extension System (NARES), the Root & Tuber Crops Development Trust (RTCDDT) which emerged from an earlier established innovation platform, the private sector and civil society (see picture 2 below).



Picture 2: Panellists presenting the Malawi experiences

The panel presentation was proceeded by a questions-and-answers session (see Annex 8) and ended with time for all learning groups to process their key insights notes and observations related to the Malawian experiences.

3.3 Mozambique country cases

The last country session consisted of four presentations from Mozambique (all presentations are available via CIP-Ethiopia or the authors):

1. Strengthening provincial and district level systems through sweetpotato research and development programs in Mozambique (Benjamin Rakotoarisoa, CIP Mozambique)
2. Perspectives from the National Agricultural Research and Extension Systems (Carolino Martino, IIAM)
3. Strengthening agricultural market systems (Jose Varindo, DPASA)
4. Collaborating with the health sector for nutrition outcomes (Augusto Massolonga, SETSAN)

Like the first country sessions, the Mozambican cases also ended with a questions-and-answers session. Afterwards, learning group members shared their notes and observations related to the Mozambican cases and agreed on key commonalities and insights.

4. Learning questions and discussions

For all learning groups the final product is presented below in summary (all complete files are available via CIP-Ethiopia or the authors):

1) Visions for system change

Each country mentioned various systems, for example agricultural extension system, agricultural research system, health extension system (includes nutrition), seed system, value chain/market system, and agriculture system. The meaning of strengthening did not come out very clearly from the presentations in the country sessions, but could mean ensuring people have guidelines, resources, and capacities to make a system function. Another meaning is that a system is efficient by making sure all stakeholders understand their roles and responsibilities and can fulfil their roles. Objectives for strengthening are to make systems more efficient and increase benefits for end-users from the systems. However, different stakeholders will have different interests that need to be compatible with the end users. End users could be smallholder farmers, vulnerable households, or others depending on the system. The visions for improved nutrition and food security seem to be guided by the global and regional agenda to achieve the sustainable development goals. However, governments do not necessarily invest adequate resources towards making these visions a reality. There may also be competing visions/interest in governments that have priority in resource allocations (e.g. farm input subsidy programs).

Recommendations:

- Looking at systems such as seed systems or value chains: All stakeholders (including government, civil society, NGO, private sector) involved in a system need to come together in a platform to agree on a joint vision for the future of the system. There is need to assess or analyze the interests of different stakeholders and come to a win-win situation and joint understanding, including measurable steps needed towards achieving the goal. CIP could initiate the process with the aim of handing over to government or national platforms for sustainability.
- CIP and partners to engage in evidence-based advocacy. This can be done by sharing lessons with higher-level government representatives or policy makers.
- Agree on a national vision for the future of the smallholder farmer so that systems can support that long-term vision. An example of a vision could be clustering smallholders for commercialization to produce a given commodity and strengthening market linkages with the private sector using more formal contracts or agreements. The vision should be aligned to existing regional visions, for example by integrating the country-level seed systems into the SADC (Southern African Development Community) and ASARECA (Association for Strengthening Agricultural Research in Eastern and Central Africa) seed harmonization.

2) Successful examples of systems strengthening

Successful examples are institutionally focused approaches including farmer field schools, farmer training centers, farmer research groups, and cooperatives. Also successful are inclusion of nutrition sensitive agriculture issues in curriculums in universities, colleges, training centers as well as secondary and primary schools (school garden feeding program). Other examples are public private partnerships (PPP) with many stakeholders including processors, multipliers, farmers, researchers, extension workers and NGOs. Malawi highlighted the promotion

of irrigation for continuous planting material for root and tuber crops and hence for sustaining markets. The RTCDT in Malawi is an inspiring example in which an innovation platform evolved into a legally recognized trust with broad stakeholder representation to coordinate the root and tuber crops sector.

Recommendations:

- Farmers should be encouraged and empowered to work in groups, such as cooperatives, to increase bargaining power and access to loans, extension services and use of machinery.
- Each training institute should include modules on nutrition sensitive agriculture in the curriculum. This is vital as issues regarding utilization of orange-fleshed sweet potatoes (OFSP) and other nutritious foods will then be taught enabling massive adoption and improvement of the nutrition status.
- PPPs should be promoted throughout the potato/ sweetpotato value chains.
- Governments should promote irrigation for potato/ sweetpotato production to have year-round supply, along with reinforcement of contract farming and technical training of producers.
- Government to reinforce policies for strengthening seed systems, including maintaining seed standards.
- Promote partnerships like the RTCDT as these are effective and efficient in coordinating efforts to strengthen the RTC sector.

3) Priority entry points for systems strengthening

The following strategic entry points for systems strengthening were identified:

- There is a gap between policy commitment and implementation.
- Strengthen networking platforms (like the RTCDT in Malawi) to link NGOs, private sector, farmers, government organizations, donors, and others.
- Strengthen capacity of service delivery departments at all levels (business, nutrition, extension, and others).
- Strengthening private sector investment in the seed system for varieties demanded by the market.
- Examine why private sector investment is currently not taking place.
- Develop more nutritious bio-fortified varieties. Agricultural research institutes need to make these new varieties available through strengthened seed systems.
- Strengthen school gardens and feeding programs to enhance adoption of OFSP.
- Evidence-based policy briefing for policy makers, and donors, NGOs, and others.
- Incorporate nutrition sensitive agriculture and OFSP as part of training institutions' curriculums.
- Develop ICT-based learning, following the example of Digital Green, Ethiopia.
- Explore options for collaboration with existing social networks for technology promotion.

Recommendations:

- We need to understand the reasons why there is a gap between policy commitment and implementation; then help to close these gaps.
- When planning a project, multi-stakeholder platforms should discuss what part of the system the project should improve, and what would be the role and responsibility of the different stakeholders to co-invest and thereby increase synergies and impact.
- We need to have strong platforms or forums and convince all partners to fulfil commitments and utilize their expertise.

- Engage private sector investment in quality seed multiplication to address bottlenecks in availability of planting material.
- Promote private sector engagement on sweetpotato processing technologies to enhance value addition.
- Establish or strengthen existing national and regional nutrition platforms.
- Develop measurable indicators and monitor performance of actors who partner in the RTC program.



Picture 3: Overview working groups each elaborating on their learning question

4) Zooming in and zooming out

There are four strategic insights/lessons from the case studies:

- There is a strong policy environment and commitment to reduce malnutrition yet poor financing for implementation by the public sector. Is financing the main issue here? Is technical support required to navigate the complex problems related to nutrition?
- There are inadequate market information, communication and coordination systems between producers, processors and consumers. Perhaps we are trying to link these sub-systems that are sometimes very difficult to link? Do we need new models to achieve this? Do we have sufficient technologies at production level to allow us to scale up multiple potato/ sweetpotato products?
- There is limited coordination between development partners in the potato-sweetpotato sector and (seemingly) limited ability to influence national government policy and priorities.
- Potato and sweetpotato seed systems are not a priority for public/private investment: the Ethiopian experience shows that seed system policy is not fully decentralized; seed development is capital intensive and currently there is no specific cooperative law that serves the private sector or cooperatives engaged in the seed system. The enabling environment for sweet potato is poor. In Mozambique and Ethiopia, potato is prioritized over sweetpotato.

Recommendations:

- For development partners and CIP: Investigate why policy commitments are not backed up by public finance and engage with governments on outcomes and recommendations of the policy support studies to leverage increases in public finance. Further, utilize multi-stakeholder platforms to engage governments on policy implementation.
- For CIP, development partners and innovation platforms: Establish and advance the business case for P/SP sector illustrating its potential contribution to national nutrition, climate resilience, and farmer income goals to influence government investment and prioritization.
- For CIP, innovation platforms and the private sector: Learn from existing multi-stakeholder platforms (like the RTCDT) and replicate this in other countries or regions, if applicable, to popularize the production, consumption and marketing of potato and sweetpotato.
- For CIP, CGIAR centers and innovation platforms: Investigate optimal (and location specific) mixed potato/ sweetpotato cropping systems that harness functional diversity: intercropping (time and space), companion planting, and rotation sequencing.
- For CIP: Organize more experiential and in-the-field learning for subsequent workshops.

5) Role of partners in systems strengthening

This group prepared an overview of the roles of partners as illustrated in the cases. They summarized the roles into three main areas:

- Policy and enabling environment: The enabling policy and environment is not conducive and does not encourage the private sector to be involved in agriculture.
- Technology and delivery system: Engage with universities, the CGIAR and with the private sector: set standards.
- Training & capacity strengthening: the RTCDT facilitates training.

Recommendations:

- Have more public private partnerships: PPPs (like the RTCDT) have to consider brokering (linking) with other players; financing of the Trust/platform should be considered in designing projects; and work with civil society organizations to reach direct beneficiaries.
- The RTCDT in Malawi is a neutral platform and its replication can be recommended in other countries.
- Build capacities of the different players so that they can implement their roles effectively. Conduct training needs assessment for the different players along the value chain.
- Increase investment in improved technologies in the areas of production, irrigation, processing, and storage.
- Promote the involvement of young people across the value chain.
- Promote mechanization to attract young people into agricultural production.

6) Trade-offs and foresight

A general observation is that presentations did not include explicitly negative consequences of systems strengthening. The topics and recommendations emerge indirectly from observations of the group members. A recommendation is therefore to strengthen capacity for foresight thinking: what are the possible risks and vulnerable groups in our proposed systems strengthening projects? Make better use of available knowledge on foresight in areas such as nutrition, socio-economic, and climate trends when designing support programs for

nutrition sensitive agriculture. In addition, link better with available resources and ongoing efforts, e.g. with the finance sector.

Recommendations related to policy and enabling environment:

- Include OFSP/nutrition content in curriculums. This will enhance knowledge of young people about nutrition and enhance sustainability of interventions.
- Organize national campaigns beyond project sites. In Mozambique the projects are site-specific which may create inequity.
- Policies and investment in quality seed: Enhance capacity of farmers and the private sector to manage seed systems according to seed standards.

Recommendation on training and capacity development: programs or projects should include more specific activities for young people: teenagers, school dropouts and unemployed youth (vocational training). Young people are the future mothers and fathers, farmers and consumers; if they learn about the importance of nutrition and OFSP, results will be more sustainable.

Recommendations for market system:

- Strengthen our work with the private sector for developing markets.
- Are the processed products losing nutritional value? Some evidence shows that there are no significant losses when OFSP is boiled, but this should be studied on a product and case specific basis.

Recommendations on technology and delivery:

- When promoting commercialization, be sensitive that women are not left behind. Need to be conscious of nutritional outcomes as well. We need communication messages that producers should not sell everything but keep some produce for home consumption.
- Governments should invest more in seed quality and delivery. While governments are good at developing policies, implementation is often lagging.
- What are the consequences of not including soil management in projects? Projects should look at the possibility of including soil management aspects to maintain soil health, which can then be translated into healthier products for consumption.

7) Barriers to system change

From the presentations, various types of barriers were identified: attrition of health workers, access to land, unclear standards for production and maintenance, inconsistent yield, insufficient end market, lack of 'clean' planting materials, limited options for varieties, lack of government ownership and leadership, lack of knowledge, weak market linkages, weak multi-sectoral/cross coordination, weak seed system, weak monitoring evaluation and learning (MEL), inadequate market information, poor linkages between sellers/farmers and buyers, pest and diseases and drought, low prices (free market), low value addition, lack of processors (industry), traditional white-fleshed sweetpotato may outperform OFSP in terms of yield and robustness, and varieties are developed but not promoted.

Four main categories of barriers were clustered: 1) availability of farm produce due to poor irrigation facilities, drought, or seasonality of production; 2) knowledge on good agricultural practices (GAP) and nutritional merits; 3) infrastructural issues: storage facilities, policies, technologies; and 4) institutional capacity such as lack of capacity for seed quality control.

The main insights on system barriers are the following:

- Although nutrition strategies and policies do exist, low government investment in the potato/ sweetpotato sector is a major barrier to system change.
- Weak platforms for multi-sectoral coordination (horizontal and vertical) of nutrition interventions are a major impediment for system change.
- Multiple (multifaceted) barriers to system change exist, which demand multiple diverse partnership to address them.
- Lack of capacity in different forms (knowledge, leadership, organizational skills, infrastructure) at various institutional levels is a major constraint to system change.

The group made the following recommendations:

- Consolidate relevant evidence and lessons and use these for advocacy targeting policy makers, donors and the private sector to increase investment in potato/ sweetpotato sector.
- Relevant stakeholders (research, extension, NGOs) should jointly conduct system diagnosis of platforms for coordination to identify gaps and opportunities for establishing and strengthening existing platforms.
- Researchers should (jointly with other stakeholders) design and conduct capacity need assessments of different potato/ sweetpotato actors and accordingly design effective strategies to strengthen technical and soft skills of actors (e.g. better coordination, business plan development, extension and delivery systems).

8) Capacity needs for system strengthening

This group made a detailed three-page report. They first presented a set of principles to be applied when strengthening capacity in systems for improved systems performance. Afterwards a set of specific recommendations were provided for different actors.

- Build and sustain political will.
Recommendation: Develop a joint advocacy and communication strategy including high level and targeted advocacy and messaging, and influence and align with national social and behavior change communication (SBCC) strategy.
- Develop support system and institutional capacity, not just individual capacities.
- Broker and build networks of relationships.
- Strengthen inclusive multi-stakeholder platforms.
Recommendation: Clarify roles and responsibilities, convening all the key players/stakeholders. Network leadership/facilitators to convene retreats and joint learning initiatives (horizontal and vertical). Focus on problem solving while linking to wider platforms and agendas.
- Maximize synergies across stakeholders.
Recommendation: Undertake joint capacity gap analysis (enabling environment, institutional and technical capacities) and consequently develop a joint scale-up road map at country level.

Finally, a set of recommendations and more detailed suggestions were made for specific categories of actors:

Civil society:

- Increase domestic resources/resource mobilization – systems need to be stronger on nutrition budgeting and resourcing.
- Resource tracking and mobilization for biofortification from governments.

- Advocate for budget allocations for biofortification within the broader nutrition/agriculture budgets.

Governments:

- Strengthen policy formulation and implementation capacities.
- Strengthen leadership and coordination – align with donors and partners, including the private sector.
- Increase domestic resources/resource mobilization.
- Lead on generating data and analysis.

Donors:

- Harmonize and align on national capacity gaps and priorities.
- Leverage domestic resource allocation with their investments.
- Incentivize adaptive capacities and innovation, including storage and access to irrigation. Reward spontaneous uptake.

Research/NARS/NGOs/institutions/private sector:

- Integrate learning from others in marketing, food labelling, food safety and branding (link to GAIN and SUNN business network initiatives).
- Improve data and use of data, including at sub-national level.
- Train farmers on a business approach to farming and cooperatives.

5. Moving forward together and closing session

All groups identified a set of proposals that they considered important as next steps. Annex 7 presents these propositions, clustered in groups. The two clusters mentioned the most frequently were:

1. Make information and documentation on the relation between nutrition and agriculture more available for the general public and via training at all relevant levels, both online (ICT supported) and through integration in curriculums for young people. CIP should consider creating a regional database for all interested stakeholders.
2. Organize more conferences and exchange learning visits between different countries (with farmer participation) and showcase good practices, highlighting key capacities at work with an in-the-field flavor in the domains of extension systems, multi-stakeholder platforms and seed-based programs. Consider creating an African learning group. Consider linking with learning on other continents and learn from other crop success stories for achieving nutrition results.

The following suggestions were mentioned by two groups:

- Consider regional program proposals for joint learning and coordination.
- Joint capacity gap analysis (analyzing enabling environment, institutional and technical performance/capacities) and developing a joint road map for scaling at country level.
- Strengthen the Regional Irish Potato Coalition.

A panel of six members reacted to the propositions identified, each bringing their own perspective:

- Filomena Maiopue from Mozambique underscored the importance of the first cluster on sharing data through ICT support/website. Information on the relation between agriculture and nutrition is especially key for Mozambique. She also favors continued learning events, such as this workshop, which could be rotated between the countries. Lastly, Ms Maiopue would welcome a more flexible approach to working together in partnerships.
- Wilkson Makumba, bringing in the Malawian perspective, mentioned the importance of investing in stronger storage facilities to allow regular supply to industry and a stable market for producers. Contract farming as a new way of handling agribusiness in the potato/ sweetpotato value chain would complement this stronger storage capacity. For Malawi it is also important to harmonize seed quality standards between countries, which will enhance international business.
- Abadi Germanye, sharing the Ethiopian priorities, started with the importance of impacting policy. We have to find new ways to influence policy as this is key for sustainability and strong partnerships. He also argued that the topics discussed in the workshop should be scaled to the African perspective and invited CIP to consider an agenda even beyond the nutrition perspective. Missing in the discussion is the urban-rural linkage. He argued that in the face of climate change research can identify new type of nutritious food crops. He agreed that nutrition is cross-cutting but made a plea that each country has to centralize and organize leadership that allows for an oversight of all actors, funding options, and sharing of data. The Irish Potato Coalition could be a good entry point for further coordination and data sharing.
- Ms Aminata Shमित from Sierra Leone observed that nutrition is a common problem and we now have a common solution through OFSP, at least for vitamin A. She also argued for the importance of propositions related to data sharing and mentioned that civil society can play a role in this respect. A special place should be made for young people as informed school children will also influence adults. Good documentation and communication, as mentioned by various groups, is key here.

- Chris Sommerville, bringing in the perspective of Irish Aid, started by mentioning the idea to have more joint analysis of current gaps, evaluate what has worked and why, what did not work well and what needs further support. He also advocated for supporting the NARS system and asked what we can realistically expect from CGIAR centers like CIP in this respect. Chris also supported proposals for further workshops and retreats to drill down deeper on what is happening in the multi-stakeholder platforms, what works, and what can be more cost effective. That would also lead to more clarity on the added-value proposition, working through multi-stakeholder coalitions, either in specific sectors (like P or SP) or linking various countries. Finally, he pointed to the need to identify innovative ways of financing emerging multi-stakeholder partnerships and what donors can do to make them more flexible and effective.
- The CIP perspective was shared by Simon Heck. He started by referring to the example of the Malawian RTCDT where service delivery and policy have complemented each other. How to learn from this case for other countries? A second observation was how to get the scope right: how broad or how narrow should the partnership work? How to gain momentum and have effective platforms? What kind of evidence can we generate from this type of new emergent practice? A third remark related to the need to provide more evidence and compelling stories to policy makers. We could facilitate more dialogue with policy actors. Another observation he gave was the importance of relating with other CGIAR centers and understanding the role and importance of other food sources: potato/ sweetpotato should be seen within a wider nutrition framework beyond CIP, and we should also link with businesses that are considering to invest. Finally, he made an argument for building bridges between projects to enhance stronger learning. Starting a community of practice of nutrition sensitive agriculture projects seems a logical step.

Finally, two closing remarks were provided. Oscar Ortiz, DDG of CIP, started by mentioning that we do not have blue prints and it is important to learn from practice. Peer learning sessions, like we had in this workshop, are inspiring ways to learn among projects and countries. CIP alone cannot solve the problems we are facing; reaching sustainable goals has to be done in partnerships, as illustrated in this workshop. We might also have to join forces with other research organizations, such as those working on the bio-fortification agenda. Oscar also mentioned the power of simple messages, a capability we need to improve. He ended by thanking all participants for their active engagement and remarked that he personally learned a lot that he will apply when assessing new project proposals.

The final closing remarks were made by Paul Demo, Regional Director of CIP-SSA. He started by acknowledging the active presence and participation of Irish Aid at the workshop. This is much appreciated and shows the commitment of IA. CIP and partners are very encouraged seeing this and grateful to IA. Secondly, he thanked Simon Heck, who he identified as the person who initially drove the process and decision to hold the event in 2018. He also expressed his gratitude to Berga Lemaga and the whole CIP-Ethiopia team for organizing and hosting the workshop, and Daniel van Vugt for helping to make it work: coming on top of their already busy agendas, this was much appreciated. The CIP-SSA regional office sees the importance of these type of events and is considering putting in place a facilitation unit for similar events in future. Strengthening capacities of NARS is key to moving forward and CIP is committed to continue providing support via technical backstopping and other facilities. The results of this workshop are exiting as the cases and the analysis illustrate how bringing people together can catalyze and strengthen system performance. Gratitude also went to Oscar Ortiz for his support and active contribution. Paul Demo also much appreciated the presence of the director of DARS from Malawi. He thanked again all participants for their active contributions and closed the workshop.

Annexes

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Annex 2: Workshop Brief

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Annex 4: Workshop methodology

Annex 5: Topics learning questions

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Annex 1: CIP Program Systems Strengthening Workshop

13-15 November 2018, Getfam Hotel, Addis Ababa

Day 1: Tuesday, 13 November

Time	Activity	Presenter/ Facilitator
8:00	Registration of participants	Kalkidan Damte and Joyce Maru (CIP)
8:30	Opening Session <ul style="list-style-type: none"> Introduction of participants Welcome/opening remarks Background and objectives of the workshop 	Jan Brouwers Berga Lemaga (CIP ETH); Oscar Ortiz (CIP Lima) and Patrick McManus Irish Aid Daniel van Vugt (CIP)
9:30	Session 1: Concepts and Approaches <ul style="list-style-type: none"> System ice breaker and introduction to system thinking System Strengthening: CIP experience with scaling up agricultural research outputs. 	Jan Brouwers Simon Heck (CIP)
10:30	Tea break	
11:00	Session 1 (continued) <ul style="list-style-type: none"> Progress and challenges in systems strengthening and institutionalization of Nutrition Sensitive Agriculture Other partner perspectives/ experiences on system strengthening and institutionalization <ul style="list-style-type: none"> VITA-Dublin presentation on the Irish Potato Coalition. Agreeing on main learning questions and learning process during workshop 	Ms Alemtsehay (Gov of Ethiopia - MOA) Derek Roulston Jan Brouwers
12:30	Lunch	
13:30	Session 2: System strengthening approaches and results: Ethiopia <ul style="list-style-type: none"> Results from system strengthening approaches in potato and sweetpotato research programs Achievements and lessons learned from System Strengthening of CIP- TARI project Achievements and lessons learned from System Strengthening and institutionalization of CIP- BOH Tigray 	Wellington (CIP) and Haile (CIP) Abadi (TARI) and Waga (SARI) Ato Teklay (Tigray BOH)

15:00	Tea break	
15:30	Session 2 (continued) <ul style="list-style-type: none"> System Strengthening perspectives from the National Agricultural Extension System Questions for clarification on Ethiopia cases and application in learning groups 	Tesema Jenorei (BOA SNNPR) and Fisseha Bezabh (BOA-Tigray) Jan Brouwers
17:00	End of day 1	

Welcome cocktail: 6 pm to 8 pm

Day 2: Wednesday, 14 November

Time	Activity	Presenter/ Facilitator
8:00	Recap of day 1	Jan Brouwers
8:30	Session 3: System strengthening approaches and results: Malawi <ul style="list-style-type: none"> Designing and implementing potato and sweetpotato research programs with country-wide development impact in mind. Panel discussion: Perspectives of National Agricultural Research and Extension Systems (NARS), the Root and Tuber Crops Development Trust approach (RTCDT) and Civil society. Questions for clarification on Malawi cases and application in learning groups 	Daniel van Vugt (CIP) Felistus Chipungu (CIP) Jan Brouwers
10:30	Tea break	
11:00	Session 4: System strengthening approaches and results: Mozambique <ul style="list-style-type: none"> Strengthening provincial and district level systems through sweetpotato research and development programs in Mozambique Perspectives from the National Agricultural Research and Extension Systems Strengthening agricultural market systems Collaborating with the health sector for nutrition outcomes Questions for clarification on Mozambique cases and application in learning groups 	Benjamin Rakotoarisoa (CIP) Carolino Martino (IIAM) Rodrigues Marcos (TBI) Augusto Massolonga (SETSAN) Jan Brouwers
13:00	Lunch	

14:00	Session 5: Identifying strategic insights and lessons <ul style="list-style-type: none"> Working groups on main learning questions: discuss insights and lessons. Consider domains like policy and enabling environment; technology and delivery systems; training and capacity strengthening, or any other domain 	Jan Brouwers
15:00	Tea break	
15:30	Session 5 (continued) <ul style="list-style-type: none"> Working groups on main learning questions prepare presentations on strategic insight, lessons and first outline of recommendations 	Jan Brouwers
17:00	End of day 2	

Day 3: Thursday, 15 November

Time	Activity	Presenter/ Facilitator
8:00	Recap of day 2	Jan Brouwers
8:30	Session 6: Developing recommendations for program design and implementation <ul style="list-style-type: none">• Presentations of all learning groups and feedback from other groups.• Include recommendations for improved programming to strengthen government and market systems, including policy and enabling environment; technology and delivery systems; training and capacity strengthening; and any other field	Jan Brouwers
10:30	Tea break	
11:00	Session 6 (continued) <ul style="list-style-type: none">• Groups on main learning questions process feedback and finalize their recommendations in a Word file or PPT.	Jan Brouwers
12:30	Lunch	
13:30	Session 7: Moving forward together <ul style="list-style-type: none">• Continued documentation, analysis and dissemination of experiences• Opportunities for programming and collaboration, next steps	Jan Brouwers Simon Heck & Oscar Ortiz
15:00	Closing session <ul style="list-style-type: none">• Closing remarks	Paul Demo Oscar Ortiz
16:00	End of day 3	

Closing dinner: 7 pm

Annex 2: Workshop Brief



System Strengthening Approaches for Scaling Up Development Outcomes from Agricultural Research

Knowledge Sharing Workshop

Addis Ababa, Ethiopia
13-15 November 2018

WORKSHOP BRIEF

Background

The International Potato Center (CIP) and its partners are implementing research and development programs to improve food security, nutrition, and economic benefits of potato and sweetpotato sectors in Africa. With support from Irish Aid, current programs in Ethiopia, Malawi and Mozambique aim to strengthen government and market systems to achieving these outcomes in a sustainable and scalable manner. These *systems strengthening* approaches seek to utilize and further strengthen existing capacities, incentive frameworks, and institutional and market linkages to improve the reach and impacts of new agricultural technologies and management practices. System strengthening interventions can enable stakeholders to guide and accelerate institutional change based on improved access to information, technologies, and institutional resources. To date, these approaches have been implemented largely separately across the three countries and have not been systematically reviewed and analyzed by stakeholders and researchers.

Objectives

The purpose of the workshop is to share, review and analyze experiences and results from system strengthening approaches across potato and sweetpotato programs in Ethiopia, Malawi, and Mozambique. The workshop also invites examples from other related initiatives working towards the same goal at country and regional levels.

The three specific objectives and related outputs are:

1. To present and discuss lessons and results of system strengthening interventions in the context of agricultural research and development programs in the three countries and related initiatives. Based on the analyses presented, stakeholders will identify the main elements of successful system strengthening approaches and key constraints for implementation.
2. To share experiences from related initiatives in the wider agricultural and rural development sector that aim to improve institutional and market-based delivery of technology, knowledge and services in these countries and regionally.
3. To identify key elements for the design of improved and measurable system strengthening programs with a focus on food systems based on root and tuber crops. This can include promising technologies, information systems, training and capacity strengthening methodologies, actions for institutional and policy change, market development, and monitoring tools and processes.

Expected outputs

The workshop will produce two main outputs: (i) a technical publication summarizing the technical approaches to system strengthening, emerging evidence and country experiences; and (ii) recommendations for improved program design, implementation, learning and coordination to increase effectiveness and efficiency of system strengthening efforts.

Format

The workshop will present papers prepared by project teams (researchers, governments, and civil society partners) that analyze findings from a range of technical areas including seed systems, crop management, nutrition, markets, and training and extension services. Main stakeholder groups will present their perspectives on opportunities and constraints to system strengthening and their priorities for future programming. Facilitated discussion and group sessions will identify key elements for improving design and implementation approaches and agree on selected actions to enhance collaboration and learning across programs and countries.

Participants

The workshop will include researchers, government partners, and other stakeholders from CIP's Irish Aid funded programs in Ethiopia, Malawi and Mozambique; as well as participants from related research and development initiatives by universities and NGO's. In total, we expect about 40 participants.

Annex 3: List of participants

	Name	Organization	Designation
MOZAMBIQUE			
1	Wellington Jogo	CIP	CIP- VISTA
2	Rodrigues marcos	Associacao Progresso	Project Coordinator
3	Benjamin Rakotoarisoa	CIP	Project Manager
4	Jose Varimelo	DPASA	Director Niassa
5	Carolino Martinho	IIAM	Director Niassa
6	Pascoal Arnaldo Sabonete Vilankulo	DPS	DPS Representative Niassa
7	Filomena Maiopue	DPASA	Director Inhambane
8	Agusto Massalonga	DPASA	SETSAN Inhambane
MALAWI			
1	Daniel van Vugt	CIP	Country manager
2	Felistus Chipungu	CIP	PM and Sweetpotato specialist
3	Raymond Chimsale	Chikwawa CADECOM	PM OFSP RTC subgrantee
5	Joshua Mphanda	District Agric Office	Assistant DADO
7	Jean Pankuku	RTCDT/ private sector	Board chair and agro-processor
8	Wilkson Makumba	DARS	Director
9	Dr Eviness Nyalugwe	MoAIWD	Deputy Director- Crop Development
10	Mr Kennedy Masamba	DARS	
11	Ben Siddle	Irish AID	
12	Lingstone Chiona	Irish AID	
CIP Nairobi			
1	Simon Heck	CIP	Leader of The Resilient.
2	Paul Demo	CIP-SSA	Regional Director for Africa
3	Joyce Maru	CIP-SSA	
CIP Lima			
1	Oscar Ortiz	CIP	DDG
Sierra Leone			
1	Hamid T	Helen Keller International	Program Manager OFSP
2	Aminata Shamit		Directorate of Food and Nutrition
Ireland/NL			
1	Chris Somerville	IA Ireland	
2	Jan Brouwers	Wageningen Un.	Facilitator
3	Derek Roulston	vita Ireland	Irish Potato Coalition
Ethiopia			
1	Haile Tesfay	CIP- Ethiopia	CIP- IA Project Coordinator in Tigray
2	Asheber Kifle	CIP- Ethiopia	Research Associate SNNPR
3	Berihun Aregawi	BOA- Tigray /nametag	Deputy head of Tigray regional BOA
4	Teklay weldemariam	BOH- Tigray	Deputy head of Tigray regional BOH
5	Tessema Jenore	BOA- SNNPR	Deputy head of SNNPR regional Bureau of Agriculture
6	Dr Afework Mulugeta	Mekelle University	Dean of School of Public Health, Makelele University

7	Dr Abadi Girmay	TARI	General Director
8	Dr Waga Mazengia	SARI	General Director
9	Fikadu Reta	Hawassa University	Dean of school Nutri. and food science
10	Tewelde H/Selassie	Tigray IA	IA Program Manager
11	Demeke Eshete	SNNPR IA	Program Officer
12	Ato Gebrmedhin Weldgiorgis		
13	Berga Lemaga	CIP- Ethiopia	Country manager
14	AEBEZER	IA	
15	TESFAYE	IA	
16	PATRIC	IA	
17	Alemtsehay	MoHealth	
18	Zeriuhn Gashaw	MoA	

Annex 4: Workshop methodology

The workshop methodology was prepared by the authors prior to the workshop and consisted of a series of different sessions. After the opening and welcome, the next session dealt with introduction to concepts and approaches. This session started with a “system energizer” tasking participants to jointly assemble a jigsaw puzzle. The energizer allowed participants to discover various elements of systems thinking, like seeing that people tend to work in subsystems, missing out on the wider picture, some start with system boundaries (starting with the boundary pieces), the need to facilitate interaction between subsystems, etc. The session continued afterwards with introductions on system thinking, CIP experiences with scaling agricultural research outputs, the Ethiopian case on progress and challenges in systems strengthening and institutionalization of nutrition sensitive agriculture, and the NGO Vita’s presentation of the Irish Potato Coalition. Next the three country perspectives on system strengthening approaches and results were shared and discussed in session II (Ethiopia day I afternoon), session III (Malawi, start of Day II) and session IV (Mozambique, end of morning Day II).

To allow a deeper process of learning, eight working groups were established, mixing representatives from the different countries and organizations. After the opening session the groups were established (numbering the audience 1-2-3-4-5-6-7-8), each group addressing one of the eight key learning questions. Learning questions addressed a main cross-cutting topic related to systems strengthening. The learning questions were drafted, reviewed and pretested before the start of the workshop and were as follows:

1. Visions for system change
2. Successful examples of systems strengthening
3. Priority entry points for systems strengthening
4. Zooming in and zooming out
5. Role of partners in systems strengthening
6. Trade-offs and foresight
7. Barriers to system change
8. Capacity needs for system strengthening.

See Annex 4 for the full description of the learning questions. The eight groups each addressed their learning question in the presentations made during the workshop in country sessions II, III and IV. Participants also individually noted remarks in a diary, which was shared and discussed after each country session. See Annex 6 for guidelines on the use of the diary.

After the opening session and the three country sessions, all groups drafted their first insights and lessons learned related to their learning question in session V. The learning groups worked for one hour to identify strategic insights and lessons, and wrote the key ones on a flip chart. These were then shared through a World Cafe format, allowing all members except the host to exchange insights with other groups and give feedback. The hosts received feedback, written on their flip chart or on a card. After two World Cafe rounds, members returned to their groups and were updated by the hosts on what type of feedback was received on the first set of insights. Members also shared what they found interesting while visiting other groups. With this new understanding, groups proceeded to make a short report (in Word or PowerPoint file) with updated insights and main lessons learned. They also added a related set of recommendations. These were all finalized before the start of the last Day III.



Picture 1: Working group identifying key insights from the country presentations

Day III started with an energizer. Afterwards, in session VI (Developing recommendations for program design and implementation), all groups presented their insights and related recommendations. They received constructive feedback and suggestions for improving their recommendations, which they used to finalize their files. All files, including presentations, were collected and copied on a USB flash, and made available for all participants at the end of the workshop. Finally, all groups identified a set of proposals that they considered important as next steps to move forwards (session VII Moving forward together). A panel with representatives from all three countries, IA, CIP and visitors from West Africa replied to the proposals, giving their own perspectives and priorities. Representatives from CIP global and sub-Saharan Africa offices closed the workshop.

Annex 5: Topics learning questions

1. **Visions for system change.** From each country perspective, what is meant with “system strengthening”? what are the objectives of the “strengthening” and for whom? And whose vision for the future is meant to guide this?
2. **Successful examples of system strengthening.** Concretely, what are key examples from each country of system strengthening? Why do you find these inspiring? How do these contribute to sustainable development?
3. **Priority entry points for system strengthening.** Which efforts for capacity development and institutional changes require specific focus in the nearby future in each country? What can be considered “low hanging fruit” or good entry points in terms of opportunities for change in each country?
4. **Zooming in and zooming out.** Do the different country session show examples of clear definitions of the systems they work with (e.g. farming system, cropping system, innovation system), while maintaining the ability to work with smaller subsystems, while keeping an eye on the big picture? Note some examples and give possible recommendations for the country teams.
5. **Role of partners in systems strengthening.** What have been the different roles and responsibilities of partners in the systems strengthening approaches in the different countries? Do you see emerging roles for new partners?
6. **Trade-offs and foresight.** Change, including system change (strengthening), will not necessarily work out positively for everyone. Did the country presentations highlight any unexpected negative consequences of system strengthening approaches on for example gender, youth, land use, access to land, vulnerability/resilience, food sovereignty, etc.?
7. **Barriers to systems change.** Did you note examples of barriers to systems change (factors that limited system strengthening), and how the country cases try to address these barriers? Can you cluster these barriers into relevant categories?
8. **Capacity needs for system strengthening.** What partnership competencies and capacities need to be strengthened in each country? What kind of support and investment is required by the different stakeholders (e.g. donor, government, private sector, research, producers) to be able to play a role in a system strengthening innovation process?

Annex 6: Diary booklet for taking notes

Cases	Learning Question 1	L.Q. 2	L.Q. 3	L.Q. 4	L.Q. 5	L.Q. 6	L.Q. 7	L.Q. 8
Eth 1:								
Eth 2:								
Eth 3:								
Eth 4:								
Malawi Intro.								
Malawi Panel:								
Moz 1:								
Moz 2:								
Moz 3:								
Moz 4:								

During presentations you can mark a “V” in a box, meaning that this presentation gives input and reflection for Learning Question X. Afterwards please add your reflection and observation at “Notes”, see next pages with the respective learning question. Please be especially attentive for your own learning group/learning question. You can compare notes later with members of your group after each country session.

Overview presentation Ethiopia and Mozambique (Malawi will be a panel session):

<p>Session 2: System strengthening approaches and results: Ethiopia</p> <p>Eth 1 Results from system strengthening approaches in potato and sweetpotato research programs</p> <p>Eth 2 Achievements and lessons learned from System Strengthening of CIP- TARI/SARI project.</p> <p>Eth 3 System Strengthening perspectives from the National Agricultural Extension System</p> <p>Eth 4 Achievements and lessons learned from System Strengthening and institutionalization of CIP- BOH Tigray project</p>	<p>Dr Wellington (CIP) and Dr Haile (CIP)</p> <p>Dr Abadi (TARI) and Dr Waga (SARI)</p> <p>Tesema Genorei (BOA SNNPR) and Fisseha Bezabih (BOA- Tigray)</p> <p>Ato Teklay (Tigray BOH)</p>
<p>Session 4: System strengthening approaches and results: Mozambique</p> <p>4.1 Strengthening provincial and district level systems through sweetpotato research and development programs in Mozambique</p> <p>4.2 Perspectives from the National Agricultural Research and Extension Systems</p> <p>4.3 Strengthening agricultural market systems</p> <p>4.4 Collaborating with the health sector for nutrition outcomes</p>	<p>Benjamin Rakotoarisoa (CIP)</p> <p>Carolino Martino (IIAM)</p> <p>Rodrigues Marcos (TBI)</p> <p>Augusto Massolonga (SETSAN)</p>

Annex 7: Clustered overview suggestions moving forward

(Between brackets: number of groups mentioning same topic)

- Make information and documentation on relation nutrition – agriculture more available for general public and via training at all relevant levels via 1) online (ICT supported) and 2) integration in curricula for young people. CIP to consider creating a regional data base for all interested stakeholders (5)
- Organize more conferences and exchange learning visits between different countries (with farmer participation) and showcase best/good practice highlighting “key capacities at work” with an in-the-field flavor in the domains of extension systems, multi-stakeholder platforms and seed-based programs. Consider creating an African learning group. Consider linking with learning in other continents and learn from other crop success stories for achieving nutrition results (5)
- Consider regional program proposal for joint learning and coordination (2)
- Joint capacity gap analysis (analyzing enabling environment, institutional and technical performance/capacities) and develop a joint scale-up road map at country level (2)
- Strengthen Regional Irish Potato coalition (2)
- Capitalize on the inter - and intra country capacity to facilitate a process for joining those that work with the same vision in RTC programs (1)
- Enhance NARS-CGIAR linkages that focus on demand driven technology generation and promotion (1)
- Develop a joint advocacy and communication strategy, influence and align with national Social Behavioral Change Communication (SBCC) strategy (1)
- Clarify roles and responsibilities across multi-stakeholder platform, convening all key players (incl. regional from MOZ, MAL, ETH). Convene retreats, focus on problem solving while linking to wider platform’s agenda (1)
- Advocate for more flexibility in research and scaling of potato/ sweetpotato programming to respond to emerging priorities (1)
- Include innovation platform approach in design of new projects (1)
- Invest more in storage and processing technologies (1)
- Harmonize seed standards for the region (1)
- Bring scalable technologies to the AU agenda (1)
- Introduce potato/ sweetpotato to urban and sub-urban agriculture (1)
- Support contract farming initiatives to promote production and marketing of RTCs (1)
- Revive (CIP, SARI) efforts to establish the RTC platform in Ethiopia. Link with potato coalition and MOZ (consider also other countries like Sierra Leone) (1)
- Engage governments in dialogue to support Nutrition Sensitive Agriculture and promote country exchange visits by policy makers (1)
- CIP to consider expanding in new high potential countries potato/ sweetpotato countries in Africa like Sierra Leone (1)

Annex 8: Questions-and-answers session Malawi panel

1. What is your role as an institution in the IA funded projects in Malawi: brief description of when you started working with CIP, what you do and success stories to share

Raymond (representing Catholic Development Commission (CADECOM)- Chikwawa): Program has the goal of food security, nutrition, income. CIP as mayor program for the activities, received some funding to facilitate the work they do. Mainly productivity and resilience and income. As CADECOM there were a number of activities: procurement and distribution of new sweetpotato varieties. Complement and support government efforts/systems in Malawi. Also work on DVM's – for access by local farmers to seed. Process in vine multiplication: 1. Register multipliers, awareness in communities about availability of vines, quality production, but more men into vine multiplication. New 18 include also women. Looking at capacity building in terms of multiplication. Establishment of on-farm demonstrations. Nutrition in prison and health. CADECOM works with care groups, breast feeding mothers.

Joshua Mphanda: Working on potato at DADO Dedza office. Negative and positive seed selection of potato to improve potato seed. That was followed by seed multiplication by farmers. Improved seed from research was made available and put in demonstrations so farmers could see how to grow potato for seed and table potato. Potato is grown twice per year. In winter, mainly multiplication to prepare for the rainy season. Farmers are happy with the new varieties because they are higher yielding compared to the local varieties. Field days to ensure wider population can learn from what other farmers are doing. This makes a lot of farmers move into potato production. Some farmers are making a lot of money from potato, including women's groups.

2. What has the project achieved with regards to institutionalization of sweetpotato and potato for sustainability and impacts in the Malawi farming system?

Technology development, involving farmers in participatory evaluation of new varieties, released 6 improved potato varieties. Departments of crops and extension developed a seed system. Extension facilitators helped to deliver at screen house. Aeroponics for clear potato tubers and sandponics for sweetpotato vines. Seed multiplication quality insurance, seed standards, inspection protocols, validated and included in seed policy. In near future included in the legal framework. How to upscale? Create awareness and demand through demos with farmers and other end-users. On-farm field days, advocacy and awareness creation. Trying to tackle issues of storage methods (sand storage and other chamber) to keep roots up to 3-6 months. Diffuse light store structures for potato.

3. How has your institution contributed to developing the market system for sweetpotato and potato?

Processing companies involved in product development/processing RTC. Involved in variety development to assess suitability (e.g. 3 varieties for crisping, 3 for boiling potato). Similar for OFSP, some recommended for processing, other just for household consumption. Sweetpotato crisps, biscuits, puree in bakery products. Tehila makes puree to be included in bread, buns etc... For cassava they do flour from dry cassava but also HQ cassava flour from fresh cassava products.

4. What are the key gaps/bottlenecks that need to be addressed to further develop the market for sweetpotato and potato?

Supply chains difficult because crops are seasonal. Meeting of the quality parameters and minimum quantity needed to be supplied. Year-round supply of raw material is important. Inconsistent market prices over the seasons and years. It is not easy to change prices of the products over time. Other challenges is difficulty storing large quantities to cover the months without supply.

5. What are the barriers for system strengthening

RTCDT registered in 2016, previously an innovation platform. Provide coordination and linkages between the different players along the value chains. Paid membership. Advocacy and dialogue, share information and knowledge. Resource mobilization. Have been working with CIP/RTC Action project.

Lack of specialization (one player in value chain doing many things) – better value if each stakeholder can do what they are best at.

Inadequate market information for farmers and industry to make decisions. Linking farmer and end-user

6. Are there capacity needs for system strengthening; and what needs to be improved to facilitate further institutionalization of potato and sweetpotato intervention?

Dr Nyalugwe on the first question: Sound policies and legislative framework to be improved. Most of the time no good job for smallholder farmers. Sometimes policy changes can be done overnight.

Response on drought: Order from government for planting materials. Standards not followed by vendors/middle men.

Investment in RTC section. Subsidy focuses on maize, but little is invested in the root and tubers. Government should come in with investment in the sector.

Strengthening the business/entrepreneurial spirit instead of 'business as usual'. Some governments move from smallholder to more commercial farmers.

Organizational skills and conflict management. Organization at farmer level (FFS, PPP, etc.). In extension you can reach more people when organized in groups – more motivating for farmers and more resource efficient and can avoid duplication. More bargaining power for farmers.

Market intelligence. Smallholders use someone to help them find a market. Need to get empowered to identify a market or a crop with a market. Need to create a conducive market.

Extension level: Well harmonized demonstration to improve adoption of varieties, instead of scattered demonstrations; better to have centrally localized.

Dr Makumba on the second question related to Capacity building: IPM – farmers are struggling to produce but half may be destroyed by pests and diseases. Need quality tubers that fetch high prices at the markets.

Strengthen processing for value addition. What about farmers selling puree instead of raw product? Post-harvest management; it is cumbersome for the farmers to keep the roots/tubers. Farmers don't have the technical know-how to keep the puree.

Farmers as individuals usually fail. Departments of crops and extension need to support farmers to be in good cooperatives to earn more and satisfy the market. But cooperatives lack the management / leadership / conflict resolutions/ business skills.

Mayor policies: National Agricultural Implementation Policy – we are using now. Food security (supported with CIP interventions), Nutrition (CIP also responding to the same).

Industry complains they are not getting enough from the farmers (seasonal crops). Policy is looking on year-round production/developing the industry, unlike only food security in the past. Need to look beyond the current production system to satisfy the industry. There are several irrigation schemes that could be used for potato/sweetpotato instead of just maize.

Thanks to CIP support, the seed policy current seed bill being finalized will include RTC. Also, to empower private sector in seed production.

Farmers should produce towards what the industry needs.

Wellington: Pests and Diseases in cassava, sweetpotato, potato – any way to have these crops integrated in the system? E.g. crop rotation? Reply: Maize and potato to be planted separately. Maize 75 cm ridge spacing, other than potato. Promoting rotation and the use of manure.

Is there not too much focus on commercialization? Does that come at the detriment of nutrition objective?

- Still a problem of marketing for farmers. In season there is over-supply that processors cannot absorb.
- Emphasis is food and nutrition. Work with district nutrition coordinating committee, district nutrition officer, frontline staff from both ministry of agriculture and ministry of health, department of nutrition.
- We should not create parallel structures; existing structures are there as guarded by Department of Nutrition, HIV and AIDS, Malawi. Mainly through care groups already supported by government or NGOs.

Berga: Is there a clear case of public private partnerships (PPP). How does that work? Is bringing all stakeholder together not competing? Reply: Trust is involved in setting up the partnerships but no competition. As of actual costs: price of roots 150, puree 270-300, flour close to 500.



The International Potato Center (known by its Spanish acronym CIP) is a research-for-development organization with a focus on potato, sweetpotato, and Andean roots and tubers. CIP is dedicated to delivering sustainable science-based solutions to the pressing world issues of hunger, poverty, gender equity, climate change and the preservation of our Earth's fragile biodiversity and natural resources.

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